

Listing of Claims:

This listing of claims will replace all prior versions, and
5 listings, of claims in the application:

1. (Currently amended) An X-ray microscope which includes a device for generating X-rays, which device is provided with:
 - 10 • means for producing a fluid jet having a curvilinear cross-section,
 - means for forming a focused radiation beam whose focus is situated on the fluid jet,said focused radiation beam comprising a beam of electrically charged particles.
- 15 2. (Previously presented) An X-ray microscope as claimed in Claim 1, wherein the beam of electrically charged particles comprises an electron beam.
- 20 3. (Previously presented) An X-ray microscope as claimed in Claim 1, wherein the cross-section of the fluid jet in the direction of the focused beam is smaller than that in the direction transversely thereof.
- 25 4. (Previously presented) An X-ray microscope as claimed in Claim 1, wherein the fluid jet consists essentially of liquid oxygen or nitrogen.
- 30 5. (Previously presented) An X-ray microscope as claimed in Claim 1, wherein the means for producing a focused beam of electrically charged particles comprises an electron gun for

a cathode ray tube, the X-ray microscope including a condenser lens disposed between the fluid jet and an object to be imaged by means of the X-ray microscope.

- 5 6. (Currently amended) An electron microscope for producing a focused electron beam and including a device for generating X-rays,

said device including:

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- means for producing a fluid jet having a curvilinear cross-section,
 - means for directing the focus of the electron beam onto the fluid jet.

- 15 7. (Previously presented) An electron microscope as claimed in Claim 6 and including an X-ray microscope, said device for generating X-rays acting as the X-ray source for the X-ray microscope.

- 20 8. (Previously presented) An electron microscope as claimed in Claim 6, the electron microscope being a scanning electron microscope.